What is claimed is:

1. An adhesive article comprising:

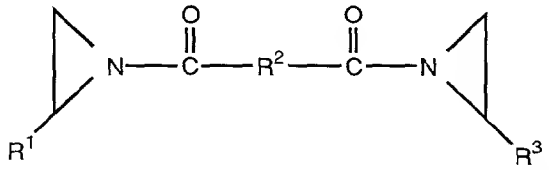
(1) a backing; and

(2) a pressure sensitive adhesive composition on said backing,

said composition comprising the reaction product of:

(A) a copolymer comprising the reaction product of (a) a (meth)acrylate ester of a non-tertiary alcohol in which the alkyl group contains between 1 and 14 carbon atoms, inclusive, and whose homopolymer has a glass transition temperature no greater than about 0°C; and (b) a carboxylic acid-functional, ethylenically unsaturated co-monomer; and

(B) a bis-amide crosslinking agent having the formula:



where R^1 and R^3 independently, are selected from the group consisting of H and C_nH_{2n+1} where n is an integer ranging from 1 to 5, and R^2 is a divalent radical selected from the group consisting of benzeno ($-C_6H_4-$), substituted benzeno, triazine, C_mH_{2m} where m is an integer ranging from 1 to 10, and combinations thereof,

the relative amounts of said co-monomer and said crosslinking agent being selected such that (i) the ratio of the number of equivalents of amide groups to the number of equivalents of carboxylic acid groups is at least about 0.1,

wherein the pressure sensitive adhesive composition comprises no greater than 10% by weight of a tackifier and no greater than 2% by weight of a plasticizer.

2. The adhesive article of claim 1 wherein said composition, when applied to a copper-containing substrate at a thickness of 0.0008 inch and exposed to a temperature of 180°C for 30 minutes, is cleanly removable following heat exposure.

3. The adhesive article of claim 1 wherein said composition, when applied to a glass substrate at a thickness of 0.0008 inch and exposed to a temperature of 180°C for 30 minutes, is cleanly removable following heat exposure.

4. An adhesive article according to claim 1 wherein said ratio is at least about 0.5.

5. An adhesive article according to claim 1 wherein said ratio is between about 0.5 and about 1.3, inclusive.

6. An adhesive article according to claim 1 wherein said ratio is between about 0.7 and about 1.0 inclusive.

7. An adhesive article according to claim 1 wherein said carboxylic acid-functional co-monomer is selected from the group consisting of acrylic acid, methacrylic acid, and combinations thereof.

8. An adhesive article according to claim 1 wherein said (meth)acrylate ester is selected from the group consisting of butyl acrylate, 2-methylbutyl acrylate, 2-ethyl hexyl acrylate, isooctyl acrylate, lauryl acrylate, n-decyl acrylate, 4-methyl-2-pentyl acrylate, isoamyl acrylate, sec-butyl acrylate, isononyl acrylate, and combinations thereof.

9. An adhesive article according to claim 1 wherein said (meth)acrylate ester is butyl acrylate.

10. An adhesive article according to claim 1 wherein said crosslinking agent comprises 1,1'-isophthaloyl-bis(2-methylaziridine).

11. An adhesive article according to claim 1 wherein the amount of said co-monomer is between about 1-5% by weight, inclusive, based upon the total weight of said copolymer.

12. An adhesive article according to claim 1 wherein the amount of said co-monomer is between about 1-2.5% by weight, inclusive, based upon the total weight of said copolymer.

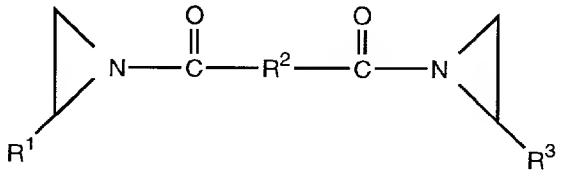
13. An adhesive article according to claim 1 wherein the amount of said co-monomer is between about 1.5-2.5% by weight, inclusive, based upon the total weight of said copolymer.

14. An adhesive article according to claim 1 wherein the alkyl group contains between 4 and 14 carbon atoms.

15. A pressure sensitive adhesive composition comprising the reaction product of:

(A) a copolymer comprising the reaction product of (a) a (meth)acrylate ester of a non-tertiary alcohol in which the alkyl group contains between 1 and 14 carbon atoms, inclusive, and whose homopolymer has a glass transition temperature no greater than about 0°C; and (b) a carboxylic acid-functional, ethylenically unsaturated co-monomer; and

(B) a bis-amide crosslinking agent having the formula:



where R^1 and R^3 independently, are selected from the group consisting of H and C_nH_{2n+1} where n is an integer ranging from 1 to 5, and R^2 is a divalent radical selected from the group consisting of benzeno ($-C_6H_4-$), substituted benzeno, triazine, C_mH_{2m} where m is an integer ranging from 1 to 10, and combinations thereof,

the relative amounts of said co-monomer and said crosslinking agent being selected such that (i) the ratio of the number of equivalents of amide groups to the number of equivalents of carboxylic acid groups is at least about 0.1,

wherein the pressure sensitive adhesive composition comprises no greater than 10% by weight of a tackifier and no greater than 2% by weight of a plasticizer.

16. A process for protecting a substrate comprising:

(A) applying an adhesive article to the substrate, said adhesive article comprising:

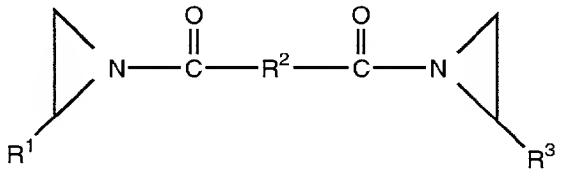
(1) a backing; and

(2) a pressure sensitive adhesive composition on said backing,

said composition comprising the reaction product of:

(a) a copolymer comprising the reaction product of (i) a (meth)acrylate ester of a non-tertiary alcohol in which the alkyl group contains between 1 and 14 carbon atoms, inclusive, and whose homopolymer has a glass transition temperature no greater than about 0°C; and (ii) a carboxylic acid-functional, ethylenically unsaturated co-monomer; and

(b) a bis-amide crosslinking agent having the formula:



where R^1 and R^3 independently, are selected from the group consisting of H and C_nH_{2n+1} where n is an integer ranging from 1 to 5, and R^2 is a divalent radical selected from the group consisting of benzeno ($-C_6H_4-$), substituted benzeno, triazine, C_mH_{2m} where m is an integer ranging from 1 to 10, and combinations thereof,

wherein the ratio between the number of equivalents of amide groups to the number of equivalents of carboxylic acid groups is at least about 0.1;

(B) heating said adhesive article and said substrate at a temperature within the range of about 150°C to about 230°C; and

(C) cleanly removing said adhesive article from said substrate following heat exposure.

17. A process according to claim 16 comprising heating said adhesive article and said substrate for at least about 30 minutes.

18. A process according to claim 16 wherein said substrate comprises a metal.

19. A process according to claim 18 wherein said substrate comprises copper.

20. A process according to claim 18 wherein said substrate comprises aluminum.

21. A process according to claim 16 wherein said substrate comprises glass.

22. A process according to claim 16 wherein said substrate comprises a polyimide.

23. A process according to claim 16 wherein said substrate comprises silicon.

24. A process according to claim 16 wherein said ratio is at least about 0.5.

25. A process according to claim 16 wherein said ratio is between about 0.5 and about 1.3, inclusive.

26. A process according to claim 16 wherein said ratio is between about 0.7 and about 1.0, inclusive.

27. A process according to claim 16 wherein said carboxylic acid-functional co-monomer is selected from the group consisting of acrylic acid, methacrylic acid, and combinations thereof.

28. A process according to claim 16 wherein said (meth)acrylate ester is selected from the group consisting of butyl acrylate, 2-methylbutyl acrylate, 2-ethyl hexyl acrylate, isooctyl acrylate, lauryl acrylate, n-decyl acrylate, 4-methyl-2-pentyl acrylate, isoamyl acrylate, sec-butyl acrylate, isononyl acrylate, and combinations thereof.

29. A process according to claim 16 wherein said (meth)acrylate ester is butyl acrylate.

30. A process according to claim 16 wherein said crosslinking agent comprises 1,1'-isophthaloyl-bis(2-methylaziridine).

31. A process according to claim 16 wherein the amount of said co-monomer is between about 1-5% by weight, inclusive, based upon the total weight of said copolymer.

32. A process according to claim 16 wherein the amount of said co-monomer is between about 1-2.5% by weight, inclusive, based upon the total weight of said copolymer.

33. A process according to claim 16 wherein the amount of said co-monomer is between about 1.5-2.5% by weight, inclusive, based upon the total weight of said copolymer.